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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/009,845

03/27/2002

Lewis Colman

6727/0K097

1219

7278

7590

03/29/2004

DARBY & DARBY P.C.

P. O. BOX 5257

NEW YORK, NY 10150-5257

EXAMINER

COLON, GERMAN

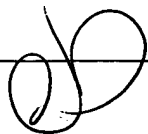
ART UNIT

PAPER NUMBER

2879

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/009,845	Applicant(s) COLMAN, LEWIS	
	Examiner German Colón	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/15/03, 1/17/02</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 13 use the alternative expression commonly referred to as a Markush group. However, it is improper to use the term “comprising” instead of “consisting of”. See *Ex parte Dotter*, 12 USPQ 382 (Bd. App. 1931) and MPEP 2173.05(h).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10-14 rejected under 35 U.S.C. 102(b) as being anticipated by Timmermans et al. (US 3,855,543).

Regarding claim 10, Timmermans discloses an electrically excited gas discharge lamp, whose output is characteristic of spontaneous emission of at least one IR-active gas species to a ground state, comprising:

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a lamp envelope containing a gas mixture comprising said at least one IR-activate gas species (see Fig. 1);

electrodes 2,3 for exciting said at least one IR-active species;

and a catalytic material 6 located within said lamp envelope.

Regarding claim 11, Timmermans discloses the lamp comprising a catalytic material. The recitation “said catalyst is operative to increase spectral stability” has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Referring to claim 12, Timmermans discloses the catalytic material 6 being coated on an inside wall of said envelope (see Fig. 1).

Referring to claim 13, Timmermans discloses the catalytic material 6 being gold.

Referring to claim 14, Timmermans discloses the IR-active gas being carbon dioxide.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermans et al. (US 3,855,543) in view of Muzeroll (US 5,340,346).

Regarding claim 1, Timmermans discloses a method of making an electrically excited gas discharge lamp, whose output is characteristic of spontaneous emission of at least one IR-active gas species to a ground state, comprising:

constructing a lamp envelope;

and filling said envelope with a gas mixture comprising said at least one IR-activate gas species;

and including a catalytic material 6 located within said lamp envelope.

Timmermans is silent regarding the step of cleaning the lamp envelope.

However, Muzeroll discloses a method of manufacturing a lamp and teaches to clean the lamp envelope in order to remove impurities and contaminants deposited within the envelope that can affect the discharge and lifetime of the device (see Col. 5, lines 17-21). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clean the lamp envelope disclosed by Timmermans with the purpose of removing impurities and contaminants deposited within the envelope that can affect the discharge and lifetime of the device.

Regarding claim 2, Timmermans-Muzeroll discloses the lamp comprising a catalytic material. The recitation "said catalyst is operative to increase spectral stability" has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

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Referring to claim 3, Timmermans discloses the catalytic material being coated on an inside wall of the envelope.

Referring to claim 4, Timmermans discloses the catalytic material being gold.

Referring to claims 5 and 7, claims 5 and 7 are rejected over the reasons stated in the rejection of claim 1.

In regards to claim 6, Timmermans-Muzeroll discloses the claimed invention except for the limitation of “the lamp volume being less than approximately 6 mL”. However, it has been held that a change in size is generally recognized as being within the level of ordinary skill in the art. Thus, it would have been obvious to one having ordinary skill in the art to provide a lamp having a volume of 6 mL, since such a modification would have involve a mere change in the size of a component.

In regards to claim 8, Timmermans discloses the IR-active gas species being carbon dioxide.

In regards to claim 9, Timmermans-Muzeroll discloses the claimed invention except for the limitation of “the concentration of carbon dioxide being less than 5%”. However, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the concentration of carbon dioxide in less than 5%, since it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC
gc

Joseph Williams
Joseph Williams